

Title (en)

RUN TIME COMPRESSION METHOD FOR A VEHICLE COMMUNICATION BUS

Title (de)

LAUFZEITKOMPRIMIERUNGSVERFAHREN FÜR EINEN FAHRZEUGKOMMUNIKATIONSBUS

Title (fr)

PROCÉDÉ DE COMPRESSION DE TEMPS D'EXÉCUTION POUR UN BUS DE COMMUNICATION DE VÉHICULE

Publication

EP 2945290 A3 20160511 (EN)

Application

EP 15165338 A 20150428

Priority

US 201414280322 A 20140516

Abstract (en)

[origin: EP2945290A2] A method for run time zero byte compression of data on a communication bus of a vehicle includes determining a number of zero bytes provided in a data frame. When there are enough zero bytes, an encoding byte is generated that maps the locations of the zero bytes in the data frame. A data length code related to the number of non-zero data bytes and the encoding byte is provided in a device header. The data length code has a value less than an uncompressed data frame. The compressed data frame is transmitted with the encoding byte and the uncompressed non-zero data bytes. To decompress the compressed data frame, the encoding byte maps the locations of the zero bytes for a data frame. The non-zero data bytes are then provided at the proper locations to recreate the data frame.

IPC 8 full level

H03M 7/30 (2006.01); **H03M 7/48** (2006.01)

CPC (source: EP US)

B60G 17/015 (2013.01 - US); **B60K 26/04** (2013.01 - US); **B60W 30/00** (2013.01 - EP US); **G01C 21/20** (2013.01 - US); **G06F 13/426** (2013.01 - EP US); **H03M 7/3066** (2013.01 - EP); **H03M 7/46** (2013.01 - US); **H03M 7/48** (2013.01 - US); **H03M 7/70** (2013.01 - EP); **B60K 2026/046** (2013.01 - US); **H03M 7/3066** (2013.01 - US)

Citation (search report)

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- [I] EP 2131501 A1 20091209 - HARMAN BECKER AUTOMOTIVE SYS [DE]
- [A] GB 1363810 A 19740821 - IBM
- [A] US 2012173846 A1 20120705 - WANG KAI FENG [CN], et al
- [A] G CHEN ET AL: "Heap compression for memory-constrained Java environments", 18TH ANNUAL ACM SIGPLAN CONFERENCE ON OBJECT-ORIENTED PROGRAMING, SYSTEMS, LANGUAGES, AND APPLICATIONS(OOPSLA '03), ANAHEIM, CALIFORNIA, USA OCTOBER 26 - 30, 2003, 26 October 2003 (2003-10-26), US, pages 282 - 301, XP055261504, ISBN: 978-1-58113-712-5, DOI: 10.1145/949305.949330

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2945290 A2 20151118; **EP 2945290 A3 20160511**; CN 105099843 A 20151125; CN 105099843 B 20200505; US 2015333766 A1 20151119; US 9219499 B2 20151222

DOCDB simple family (application)

EP 15165338 A 20150428; CN 201510247680 A 20150515; US 201414280322 A 20140516